

AMENDMENTS TO THE CLAIMS:

Please replace the claims with the claims provided in the listing below wherein status, amendments, additions and cancellations are indicated.

1. - 6. (Canceled)

7. (Currently amended) A method ~~Method~~ for automatically switching off power to a heating element of a deep fryer when the ~~heating element~~ deep fryer is accidentally switched on while not immersed in ~~filled with oil in the deep fryer~~, the deep fryer comprising a vessel having a closed bottom and sides wherein the heating element extends substantially horizontally within the vessel for direct contact with the oil, the method comprising:

defining different relevant threshold values for respective ones of different locations within the vessel;

~~continuously measuring temperature of the heating element at~~ temperatures at least one predetermined point on the heating element, said different locations within the vessel;

~~continuously determining a derivative of the continuously measured temperature~~ respective derivatives of the temperatures measured; and

automatically terminating power to the heating element when a value of one of the derivative derivatives exceeds a predetermined respective one of said relevant threshold values.

8. (Currently amended) A method for automatically switching off power to a heating element of a deep fryer when the deep fryer is accidentally switched on while not filled with oil, the deep fryer comprising a vessel having a closed bottom and sides wherein the heating element extends substantially horizontally within the vessel for direct contact with the oil, the method comprising:

defining different relevant threshold values for respective ones of different locations within the vessel;

measuring temperatures at said different locations within the vessel;

determining respective derivatives of the temperatures measured; ~~Method according to claim 7, further comprising~~

determining an average of a averaging momentary values of at least one of the derivatives derivative in a time interval window having a predetermined length to obtain an averaged value; and

automatically terminating power to the heating element when said average value exceeds a respective one of said relevant threshold values immediately preceding a moment when it is to be determined whether the power to the heating

~~element is to be terminated and wherein the predetermined threshold of the derivative is a threshold of said average.~~

9. (Cancelled)

10. (Currently amended) ~~A method~~ Method according to claim 7, wherein the deep fryer is ~~configured for the deep frying of potatoes~~ a potato fryer.

11. (Currently amended) A control apparatus for automatically switching off power to a heating element of a deep fryer when the ~~heating element~~ deep fryer is accidentally switched on while not immersed in filled with oil in the deep fryer, the deep fryer comprising a vessel having a closed bottom and sides wherein the heating element extends substantially horizontally within the vessel for direct contact with the oil, the control comprising:

~~at least one temperature sensor for continuously~~ sensors disposed at different locations within the vessel for measuring temperature temperatures at each of the different locations, different relevant threshold values being assigned respectively to the different locations; ~~at least one predetermined point on the heating element, a differentiator determining~~

a device for determining derivatives ~~a derivative~~ of the ~~continuously measured temperature~~ temperatures at the different locations; and

a ~~comparator~~ power termination device configured for automatically terminating power to the heating element when a value of one of the derivatives is determined to exceed ~~comparing the derivative with a predetermined threshold and terminating power to the heating element when the derivative exceeds a predetermined~~ respective one of said relevant threshold values.

12. (Currently amended) A control apparatus ~~Control~~ according to claim 11, wherein the deep fryer is ~~configured for deep frying or potatoes~~ a potato fryer.

13. (New) A method according to claim 8, wherein the deep fryer is a potato fryer.